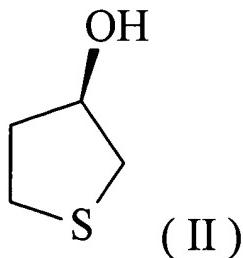
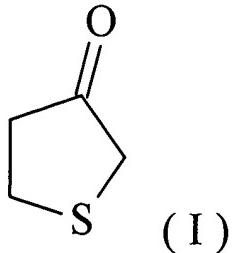


IN THE CLAIMS

Claim 1 (original): A method for manufacturing (R)-tetrahydrothiophene-3-ol denoted by formula (II):



by bioconversion of tetrahydrothiophene-3-one denoted by formula (I):



to (R)-tetrahydrothiophene-3-ol denoted by formula (II), comprising the steps of:

- (A) incubating the tetrahydrothiophene-3-one denoted by formula (I) in the presence of a strain, or a preparation of a cultured cell thereof, belonging to *Penicillium*, *Aspergillus*, or *Streptomyces* that is capable of said bioconversion; and
- (B) collecting the (R)-tetrahydrothiophene-3-ol denoted by formula (II) from incubated solution.

Claim 2 (original): The method according to claim 1, wherein said strain capable of the bioconversion is a strain belonging to *Penicillium vinaceum*, *Aspergillus ochraceus*, or *Streptomyces michiganensis*.

Claim 3 (currently amended): The method according to claim 1 ~~or 2~~, wherein said strain capable of the bioconversion is *Penicillium*

*vinaceum* IAM7143 (Deposit Number: NITE BP-35), *Aspergillus ochraceus* ATCC18500 (deposit Number: NITE BP-41), or *Streptomyces michiganensis* NBRC12797 (Deposit Number: NITE BP-36).

Claim 4 (original): A method for crystallization of optically active tetrahydrothiophene-3-ol of improved optical purity, characterized by maintaining a solution comprising optically active tetrahydrothiophene-3-ol and organic solvent at equal to or lower than 1°C to cause optically active tetrahydrothiophene-3-ol to crystallize from said solution.

Claim 5 (original): A method for crystallization of optically active tetrahydrothiophene-3-ol of improved optical purity, characterized by adding optically active tetrahydrothiophene-3-ol dropwise to organic solvent at a solution temperature of equal to or lower than 1°C to cause optically active tetrahydrothiophene-3-ol to crystallize.

Claim 6 (original): The method according to claim 5, wherein said dropwise addition of optically active tetrahydrothiophene-3-ol is conducted with stirring said organic solvent.

Claim 7 (currently amended): The method according to ~~any of claims 4 to 6~~ claim 4, wherein the organic solvent is compatible with optically active tetrahydrothiophene-3-ol, and does not solidify at a temperature at which the crystallization is conducted.

Claim 8 (currently amended): The method according to ~~any of claims 4 to 7~~ claim 4, wherein the optically active tetrahydrothiophene-3-ol comprises excess amount of R-isomer.

Claim 9 (currently amended): The method according to ~~any of claims 4 to 8~~ claim 4, wherein said organic solvent is at least

one solvent selected from the group consisting of hexane, heptane, ethyl acetate, butyl acetate, acetone, methyl ethyl ketone, ethanol, 2-propanol and toluene, or a mixed solvent thereof.

Claim 10 (currently amended): The method according to ~~any of~~ claims 4 to 9 claim 4, wherein the crystallization temperature of said optically active tetrahydrothiophene-3-ol is equal to or lower than 1 °C.